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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/723,271      | 11/26/2003  | Ehud Levy            | 40654.283695        | 8769             |

23370 7590 11/08/2006

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| EXAMINER |
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CINTINS, IVARS C

|          |              |
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| ART UNIT | PAPER NUMBER |
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1724

DATE MAILED: 11/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/723,271

**Applicant(s)**

LEVY, EHUD

**Examiner**

Ivars C. Cintins

**Art Unit**

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, 7 and 9-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiller (U.S. Patent No. 3,950,251) in view of Yanou et al. (U.S. Patent Application Publication No. 2004/0060873; hereinafter "Yanou"). Hiller discloses a two-stage water filter cartridge comprising a first porous layer **19** formed of polyethylene (see col. 2, lines 33-35); a porous purification block **34** comprising polymer bonded activated carbon (col. 3, lines 7-11); and a cavity **35** between the inner surface of the first porous layer and the outer surface of the porous purification block, which cavity **35** is filled with granules of purification media, such as activated carbon (col. 3, lines 12-16). Accordingly, this primary reference discloses the claimed invention with the exception of the particle size (i.e. powdered) and type (claims 7 and 18) of the purification material employed, the micron rating of the polyethylene block (claims 15 and 20), and the packed density of the porous purification material (claims 19 and 21). Yanou teaches that it is known to purify water with either granular activated carbon or powdered activated carbon (see ¶ 0016). This reference further discloses that it is known to purify water with the materials recited in claims 7 and 18 (see ¶ 0014). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the powdered activated carbon of Yanou for the for the granular activated carbon of Hiller, since this secondary reference teaches that both of these two

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forms of activated carbon are capable of being used in water purification filters. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ powdered activated carbon having the recited particle size, since this recited particle size represents powdered materials. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ polyethylene having the recited micron rating, and to construct the porous material such that it has the recited packed density, in order to ensure that the filtration assembly of the thus modified primary reference has an adequate capability for purifying water. Moreover, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a zeolite material in combination with the activated carbon of the thus modified primary reference, as further suggested by Yanou, in order to provide additional water purification capability for this modified primary reference filter.

Claims 1-3, 5, 9-17 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiller in view of Thomsen et al. (U.S. Patent No. 4,654,142; hereinafter "Thomsen"). Hiller discloses the claimed invention with the exception of the particle size (i.e. powdered) of the purification material employed, the micron rating of the polyethylene block (claims 15 and 20), and the packed density of the porous purification material (claims 19 and 21). Thomsen teaches filtering water with a powdered filter media such as activated carbon (see col. 4, lines 26-31); and it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the powdered activated carbon of Thomsen for the granular activated

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carbon of Hiller, since this secondary reference teaches that such powdered activated carbon is capable of purifying water. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ powdered activated carbon having the recited particle size, since this recited particle size represents powdered materials. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ polyethylene having the recited micron rating, and to construct the porous material such that it has the recited packed density, in order to ensure that the filtration assembly of the thus modified primary reference has an adequate capability for purifying water.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hiller in view of Yanou or Thomsen as applied above, and further in view of Carrubba et al. (U.S. Patent No. 5,338,458). The modified primary reference discloses the claimed invention with the exception of the type of purification material employed. Carrubba et al. discloses purifying water containing chloramines (col. 1, lines 11-12) with a catalytic char type activated carbon; and it would have been obvious to one of ordinary skill in the water purification art to employ this catalytic char in the filter of the modified primary reference, in order to provide chloramines removal capability for this modified primary reference filter.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hiller in view of Yanou or Thomsen as applied above, and further in view of Levy (U.S. Patent Publication No. 2001/0042719). The modified primary reference discloses the claimed invention with the exception of the type of purification material employed. Levy

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discloses a water filtration media comprising activated carbon and zirconia; and would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the zirconia of Levy into the water purification material of the modified primary reference, in order to provide additional water purification capability for this modified primary reference filter.

Applicant's arguments filed August 30, 2006 have been noted and carefully considered, but no longer appear to be relevant in view of the new grounds of rejection. Applicant should note, however, that both Yanou and Thomsen disclose the use of powdered activated carbon in loose form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is 571-272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Duane Smith, can be reached at 571-272-1166.

The centralized facsimile number for the USPTO is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Ivars C. Cintins**  
**Primary Examiner**  
**Art Unit 1724**

I. Cintins  
November 7, 2006